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1 [Multimedia: Streaming speech³: a framework for generating and streaming 3D text-to-speech and audio presentations to wireless PDAs as specified using extensions to SMIL](#)

Stuart Goose, Sreedhar Kodlahalli, William Pechter, Rune Hjelsvold

 May 2002 **Proceedings of the 11th international conference on World Wide Web**

Publisher: ACM Press

Full text available: pdf(108.21 KB)

 Additional Information: [full citation](#), [abstract](#), [references](#), [citing](#), [index terms](#)

While monochrome unformatted text and richly colored graphical content are both capable of conveying a message, well designed graphical content has the potential for better engaging the human sensory system. It is our contention that the author of an audio presentation should be afforded the benefit of judiciously exploiting the human aural perceptual ability to deliver content in a more compelling, concise and realistic manner. While contemporary streaming media players and voice browsers share ...

Keywords: 3D audio, PDA, SMIL, accessibility, location-based, mobile, spatialization, speech synthesis, streaming, wireless

2 [Multimedia: Automatic music video summarization based on audio-visual-text analysis and alignment](#)

Changsheng Xu, Xi Shao, Namunu C. Maddage, Mohan S. Kankanhalli

 August 2005 **Proceedings of the 28th annual international ACM SIGIR conference on Research and development in information retrieval SIGIR '05**

Publisher: ACM Press

Full text available: pdf(593.12 KB)

 Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper, we propose a novel approach for automatic music video summarization based on audio-visual-text analysis and alignment. The music video is separated into the music and video tracks. For the music track, the chorus is detected based on music structure analysis. For the video track, we first segment the shots and classify the shots into close-up face shots and non-face shots, then we extract the lyrics and detect the most repeated lyrics from the shots. The music video summary is gen ...

Keywords: alignment, chorus, lyrics, music video, shot, summarization

3 "I'll get that off the audio": a case study of salvaging multimedia meeting records



Thomas P. Moran, Leysia Palen, Steve Harrison, Patrick Chiu, Don Kimber, Scott Minneman, William van Melle, Polle Zellweger

March 1997 **Proceedings of the SIGCHI conference on Human factors in computing systems**

Publisher: ACM Press

Full text available: pdf(1.17 MB) Additional Information: [full citation](#), [references](#), [citings](#), [index terms](#)

Keywords: LiveBoard, activity capture, audio recording, meeting support tools, multimedia, notetaking, salvaging, work process support

4 A development process for large multimedia titles



Mark Ryan, Rich Helms

October 1994 **Proceedings of the 12th annual international conference on Systems documentation: technical communications at the great divide**

Publisher: ACM Press

Full text available: pdf(1.24 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Within IBM there are many groups that have made small-scale multimedia titles. Large titles, however, are not so common. This paper describes the process that we followed to create a large title, Experience C++. It begins with a description of why we decided to create a multimedia title about C++. It then describes the process that we followed to make the title. Finally, it describes the lessons that we learned and our plans for the future.

5 Oral session 2: web searching and applications: Framework for personalized multimedia summarization



Lalitha Agnihotri, John Kender, Nevenka Dimitrova, John Zimmerman

November 2005 **Proceedings of the 7th ACM SIGMM international workshop on Multimedia information retrieval MIR '05**

Publisher: ACM Press

Full text available: pdf(459.86 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We extend and validate methods of personalization to the domain of automatically created multimedia summaries. Based on a previously performed user study of 59 people we derived a mapping of personality profile information to preferred multimedia features. This article describes our summarization algorithm. We define constraints for automatic summary generation. Summaries should consist of contiguous segments of full shots, with duration proportional to the log of video length, selected by an ob ...

Keywords: framework, methodology for validation, multimedia summary, personalization, user study, video analysis

6 Multimedia document architecture (panel session)



Stephen Bulick, Terry Crowley, Lester Ludwig, Jonathan Rosenberg

August 1990 **ACM SIGGRAPH 90 Panel Proceedings**




Publisher: ACM Press

Full text available: pdf(4.35 MB) Additional Information: [full citation](#), [index terms](#)



7 News on-demand for multimedia networks





Gene Miller, Greg Baber, Mark Gilliland

-  September 1993 **Proceedings of the first ACM international conference on Multimedia**
Publisher: ACM Press
Full text available:  [pdf\(106.03 KB\)](#)  [ps\(1.21 MB\)](#) Additional Information: [full citation](#), [references](#), [citing](#)s, [index terms](#)

Keywords: authoring, database, digital video, information service, messaging, networked multimedia, news, retrieval, wideband



- 8 Multimedia description framework (MDF) for content description of audio/video documents 
Michael J. Hu, Ye Jian
August 1999 **Proceedings of the fourth ACM conference on Digital libraries**
Publisher: ACM Press
Full text available:  [pdf\(206.64 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: content description, media search and retrieval, meta-data


- 9 Speech and audio in window systems: when will they happen? 
B. Arons, C. Schmandt, M. Hawley, H. Ludwig, P. Zellweger
July 1989 **ACM SIGGRAPH Computer Graphics , ACM SIGGRAPH 89 Panel**
Proceedings SIGGRAPH '89, Volume 23 Issue 5
Publisher: ACM Press
Full text available:  [pdf\(2.78 MB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

Good afternoon. Boy, I can't see anything out there. I assume you all can see me -- thats why these lights are here. My name is Chris Schmandt from the Media Lab at MIT. I'm co-chairing this panel with Barry Arons, who is sitting over here. It's actually quite a pleasure to co-chair this panel with Barry. We've been working together off and on for more years than I care to remember.

This panel has a long ridiculous name. Basically it's about audio and window systems and work ...

- 10 A comparison of the use of text and multimedia interfaces to provide information to the elderly 
Virginia Z. Ogozalek
April 1994 **Proceedings of the SIGCHI conference on Human factors in computing systems: celebrating interdependence**
Publisher: ACM Press
Full text available:  [pdf\(744.26 KB\)](#) Additional Information: [full citation](#), [references](#), [citing](#)s, [index terms](#)

Keywords: aging, computers and medicine, elderly users, health care, information search and retrieval, interactive video, multimedia, user interface, user study

- 11 Authoring Support: DEMAIS: designing multimedia applications with interactive storyboards 
Brian P. Bailey, Joseph A. Konstan, John V. Carlis

October 2001 **Proceedings of the ninth ACM international conference on Multimedia**

Publisher: ACM Press

Full text available:  pdf(1.04 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citing](#), [index terms](#)

To create an innovative interactive multimedia application, a multimedia designer needs to rapidly explore numerous behavioral design ideas early in the design process, as creating innovative behavior is the cornerstone of creating innovative multimedia. Current tools and techniques do not support a designer's need for early behavior exploration, limiting her ability to rapidly explore and effectively communicate behavioral design ideas. To address this need, we have developed a sketch-based, in ...

Keywords: authoring, gestures, multimedia design, storyboards

12 LiteMinutes: an Internet-based system for multimedia meeting minutes



Patrick Chiu, John Boreczky, Andreas Girgensohn, Don Kimber

April 2001 **Proceedings of the 10th international conference on World Wide Web**

Publisher: ACM Press

Full text available:  pdf(1.68 MB)

Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: hypermedia systems, meeting capture, meeting support systems, multimedia applications, note taking, video applications

13 Architecture, design, and implementation of a multimedia conference system

Anna A. Hać, Dongchen A. Lu

March 1997 **International Journal of Network Management**, Volume 7 Issue 2

Publisher: John Wiley & Sons, Inc.

Full text available:  pdf(517.69 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this article a new multimedia conference system is designed and implemented which allows a group of users to conduct a meeting in real time. Participants can jointly view and edit relevant multimedia information, including text, graphics, and still images distributed throughout the network. © 1997 John Wiley & Sons, Ltd.

14 Scalable multimedia delivery for pervasive computing



John R. Smith, Rakesh Mohan, Chung-Sheng Li

October 1999 **Proceedings of the seventh ACM international conference on Multimedia (Part 1)**

Publisher: ACM Press

Full text available:  pdf(1.27 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citing](#), [index terms](#)

Growing numbers of pervasive devices are gaining access to the Internet and other information sources. However, much of the rich multimedia content cannot be easily handled by the client devices with limited communication, processing, storage and display capabilities. In order to improve access, we are developing a system for scalable delivery of multimedia. The system uses an InfoPyramid for managing and manipulating multimedia content composed of video, images, audio and text. The InfoPyr ...

15 Evolving video skims into useful multimedia abstractions



Michael G. Christel, Michael A. Smith, C. Roy Taylor, David B. Winkler

January 1998 **Proceedings of the SIGCHI conference on Human factors in computing systems**

Publisher: ACM Press/Addison-Wesley Publishing Co.

Full text available:  pdf(1.02 MB) Additional Information: [full citation](#), [references](#), [citing](#), [index terms](#)

Keywords: digital video library, empirical studies, evaluation, multimedia, video abstraction, video browsing, video skim

16 Content 3: audio and security: Multimodal content-based structure analysis of karaoke music



Yongwei Zhu, Kai Chen, Qibin Sun

November 2005 **Proceedings of the 13th annual ACM international conference on Multimedia MULTIMEDIA '05**

Publisher: ACM Press

Full text available:  pdf(1.61 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper presents a novel approach for content-based analysis of karaoke music, which utilizes multimodal contents including synchronized lyrics text from the video channel and original singing audio as well as accompaniment audio in the two audio channels. We proposed a novel video text extraction technique to accurately segment the bitmaps of lyrics text from the video frames and track the time of its color changes that are synchronized to the music. A technique that characterizes the origin ...

Keywords: karaoke, multimodality, music information retrieval, music structure analysis, video text detection

17 Information services: A document model for multimedia information

J. Emery, A. Karmouch

October 1993 **Proceedings of the 1993 conference of the Centre for Advanced Studies on Collaborative research: distributed computing - Volume 2**

Publisher: IBM Press

Full text available:  pdf(943.47 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

Multimedia documents differ significantly from traditional documents, which are composed of text and possibly geometric graphics. The inclusion of continuous media such as audio and video imposes new requirements on document representation. The MEDIADOC model supports the creation of multimedia documents by means of a logical structure, a layout structure, and a rendering scenario that is a schedule for document playback. Special document creation tools are also required to facilitate the potent ...


18 An interactive multimedia textbook for introductory computer science



Oliver Grillmeyer

March 1999 **ACM SIGCSE Bulletin , The proceedings of the thirtieth SIGCSE technical symposium on Computer science education SIGCSE '99**, Volume 31 Issue 1

Publisher: ACM Press

Full text available:  pdf(759.04 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citing](#), [index terms](#)

A multimedia implementation of an introductory computer science text based on the LISP dialect Scheme, is described. The text, *Exploring Computer Science with Scheme* [4], is designed for beginning students who may have no prior experience using computers. The goal is to create an environment that facilitates learning of the material and concepts in the text. The multimedia system includes hypertext abilities to jump through the text, search, and mark positions in the text. A personal note ...

19 Towards intelligent recognition of multimedia episodes in real-time applications

J. Gabbe, A. Ginsberg, B. Robinson

October 1994 **Proceedings of the second ACM international conference on Multimedia****Publisher:** ACM Press

Full text available: pdf(999.61 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The ability to automatically capture and index multimedia information for later perusal and review is critical to the success of future multimedia services. In this paper, we describe how to automatically generate indexes of real-time streams without requiring deep content analysis. Our techniques involve segmenting continuous audio and video into natural units, and relating these to discrete events from the multimedia application, such as user interactions, control events, and data content ...

20 The multimedia object presentation manager of MINOS: a symmetric approach

S. Christodoulakis, F. Ho, M. Theodoridou

June 1986 **ACM SIGMOD Record , Proceedings of the 1986 ACM SIGMOD international conference on Management of data SIGMOD '86**, Volume 15 Issue 2**Publisher:** ACM Press

Full text available: pdf(1.48 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Large multimedia data bases become feasible due to recent advances in hardware technology. A very important component of multimedia data base management systems will be the presentation manager which will be responsible for effective multimedia presentation and browsing on the screen of workstations. In this paper we present the functions provided for multimedia presentation and browsing in MINOS, a multimedia information system. The presentation and browsing capabilities provide ...

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